

CUMULATIVE INDEX 1992

Volume 22

January	EXTERNAL SKELETAL FIXATION, pages 1-243
March	OPINIONS IN SMALL ANIMAL ANESTHESIA, pages 245-502
May	CANINE HIP DYSPLASIA, pages 503-750
July	DISEASES OF THE SPINE, pages 751-1041
September	UPDATE ON RESPIRATORY DISEASES, pages 1043-1264
November	FELINE DENTISTRY, pages 1265-1496

Note: Page numbers of issues and article titles are in **boldface** type

- Abduction-external rotation test, for canine hip dysplasia, 649-650
- Acetpromazine, cardiovascular response to, 254-256
 - in dilated cardiomyopathy, 464
 - in hypertrophic cardiomyopathy, 461
- Acetabular canine hip dysplasia, 646-647
- Acetabular filling, as contraindication to pelvic osteotomy, 666
- Acetabulum, anatomy of, 722
 - damage to, in canine hip dysplasia, 508-509
 - development of, normal, 560
 - dorsal, forces acting on, 646-647
 - in canine hip dysplasia, pelvic osteotomy of, **645-682**
 - loss of, as contraindication to pelvic osteotomy, 666
 - preparation of, for total hip arthroplasty, 709
- Acetylcholine, role in autonomic airway control, 1059
- Acetylsalicylic acid, precautions when using, 371
- Acrylic frames, for transarticular external skeletal fixation, 190-193
 - biphase technique for, 192-193
 - cutting of, 191-192
 - materials for, 190-191
- Acrylic-pin splint(s), for external skeletal fixation, 24-31
 - application technique for, 26-31
 - for oral fractures, 113-115
- Activity level, following BOP/shelf arthroplasty, 693
- Acupuncture, analgesia with, **374-379**
 - charts in, 375
 - for chronic pain, 377-378
 - physiology of, 375-376
 - points in, 374-375
 - surgical, 376-377
 - traditional Chinese, 374
- Adenosine monophosphate, cyclic, and bronchial smooth muscle tone, 1232
- Aerosolization of drugs, for respiratory disease, 1250-1251
- Airflow rate, during anesthesia, 1051
- Airflow resistance, in dog, 1215-1216
- Airway(s), anatomy of, 1044-1048
 - autonomic regulation of, 1058-1062
 - excitatory innervation, 1058-1060
 - inhibitory innervation, 1060-1061
 - mediators in airway disease, 1061-1062
 - caliber changes in, 1231-1233
 - canine, anatomy of, 1211-1214
 - clinically significant features of, 1214-1215
 - resistance in, 1044
 - collapse of, dynamic, 1052-1055
 - disease of. See *Airway disease*.
 - extrathoracic, collapse of, 1052-1054
 - obstruction of, and airway function, 1057-1058
 - function of, factors affecting, 1057-1062
 - generations of, 1047

Airway(s) (*Continued*)

- inflammation of, and respiratory defense mechanisms, 1194-1195
- intrathoracic, collapse of, 1054-1055
- obstruction of, and airway function, 1058
- management of, with mask anesthesia induction, 311
- obstruction of, 1057-1058
 - in brachycephalic dogs, **1145-1153**
 - in feline bronchopulmonary disease, 1189
 - peripheral, airway pressures in, 1055
 - physiology of, **1043-1064**
 - pressure in, during forced exhalation, 1055
 - during normal breathing, 1054
 - resistance in, and rebreathing circuits, 400
 - calculation of, 1050
 - in allergic dogs, effect of antigen challenge on, 1060
 - smooth muscle of, nerves supplying, 1059
- Airway disease, lower, in dog, clinical findings in, 1216-1226
- diagnosis of, 1217-1220
 - bronchopulmonary cytology, 1217-1218
 - bronchoscopy, 1218-1219
 - histopathologic findings, 1220
 - pulmonary function studies, 1219
 - radiography, 1217
 - tracheobronchial culture, 1218
 - therapy for, 1220-1226
- obstructive, cytology of, 1076, 1078
- Albumin, in cerebrospinal fluid, 796-801
- Albumin quota, for cerebrospinal fluid protein, calculation of, 798-799
- Albuterol, for canine chronic bronchitis, 1223
- Alfentanil, pharmacokinetic variables for, 246-247
- Alpha-2 agonists, as anesthetic adjuvants, advantages and guidelines for, **289-293**
 - precautions when using, **295-296**
 - behavioral effects of, 295
 - cardiovascular effects of, 294
 - epidural, effects of, 415
 - interaction with other drugs, 294-295
- Alveolar bone, in cat, 1273
 - defects of, in extraction sites, 1375-1376
 - resorption of, with dental resorptive lesions, 1387
 - tooth ankylosis with, 1396
- Alveolar macrophages, undifferentiated, 1079
- Alveolar minute ventilation, and inhalational anesthesia induction and recovery speed, 299
- Alveolar pressure, during forced exhalation, 1055
 - during normal breathing, 1054
- AMAH fixation splints, 6
- Aminocaproic acid, for degenerative myelopathy, 969
- Aminoglycosides, for gram-negative respiratory infection, 1252-1253
- Aminophylline, for feline bronchial asthma, 1196
- Amphotericin B, for respiratory fungal infection, 1253
- Amputation and pulp capping, of feline teeth, 1448-1450
 - complications of, 1450
 - instruments for, 1449
 - materials for, 1449
 - technique of, 1449-1450
- Analgesia, acupuncture for, **374-379**
 - postoperative, **353-379**. See also *Postoperative analgesia*.
- Analgesics, routine use of, case against, **359-360**
 - case for, **357-359**
- Anesthesia, concentration of, rate of change of, and rebreathing circuits, 401
 - depth of, guidelines for judging, **432-434**
 - most reliable signs, 432-433
 - nonsigns, 434
 - reliable signs, 433
 - unreliable signs, 433-434
 - undefinable nature of, **435-437**
 - epidural, **413-423**. See also *Epidural anesthesia*.
 - gas flow rate in, **381-387**
 - general, maintenance of, inhalational agent for, **312-313**
 - injectable agent for, **275-277**
 - in feline dental evaluation, need for, 1318
 - in feline dental prophylaxis, 1300
 - inhalational, **297-339**. See also *Inhalational anesthesia*.
 - injectable, **245-296**. See also *Injectable anesthesia*.
 - monitoring and support for, **425-450**
 - protocols of, comparative costs of, 385 for specific conditions, **451-496**
 - quantitative, **405-411**. See also *Quantitative anesthesia*.
 - somatosensory evoked potential applications in, 852-853
- Anesthetized patient, monitoring of, 425-431

- Animal(s), as human dental models, 1310-1311
- Animal compliance, failure of, in pelvic osteotomy, 681
- Antebrachium, arteries of, 106
cross-sectional anatomy of, 138
- Anti-inflammatory drugs, for respiratory disease, 1237-1247, 1242
for tracheal collapse, 1209
- Antibiotics, for canine chronic bronchitis, 1224-1225
for feline gingivitis/stomatitis, 1374
for total hip arthroplasty, 708
for tracheal collapse, 1209
- Anticholinergic drugs, for bronchoconstriction, 1241-1244
- Antimicrobials, for bronchial infection, 1255
for respiratory infection, 1243, 1251-1253
- Antiprostaglandins, advantages and guidelines for, 367-369
precautions when using, 370-374
- Antitussives, for cough, 1242, 1247-1249
for tracheal collapse, 1209
- Apical bone, in cat mouth, radiographic abnormalities in, 1293
- Apical changes, in feline teeth, interpretation of, 1290
- Apical delta, in lower canine tooth, in cat, 1271
- Apicoectomy, technique of, in cat, 1444
- Arachidonic acid cascade, 1062
in airway function, 1213
- Arrhythmias, intraoperative, electrocardiographic monitoring of, 438
- Arterial blood gas analysis, in pulmonary function testing, 1088-1091
- Articular cartilage, fissures of, in canine hip dysplasia, 545
in degenerative joint disease, 547-548
normal, 546
- Ascending evoked potentials, abnormalities of, 847-849, 853-854
for spinal cord conduction velocity measurement, 843-846
- Ascorbate therapy, for canine hip dysplasia, 598
- Aspergillosis, nasal, 1120-1124
biopsy specimen of, 1123
radiography of, 1122
- Aspirin, for canine hip dysplasia, 599
precautions when using, 371
- Asthma, feline, 1188
bronchial, clinical presentation and therapeutic considerations in, 1195-1197
pathogenesis of, 1237
- Ataxic gait, in intervertebral disc disease, 894
- Atlantoaxial luxation, and spinal cord trauma, 994
- Atlantoaxial malformations, congenital, 990-996
- Atracurium besylate, as neuromuscular blocking agent, 343
- Atropine, for bronchoconstriction, 1243
- Auscultation, of anesthetized patient, 429
- Autoimmune disease, and feline gingivitis/stomatitis, 1366
of feline oral cavity, 1329-1330
- Avian fractures, repair of, recommendations for, 233-236
- Babinski reflex, examination of, in spinal disease, 769-770
- Bacterial infections, and meningitis/myelitis, 958-960
- Bacterial meningitis, cerebrospinal fluid in, 789
- Bain nonbreathing circuits, components of, 398
- Bandoleer bandage, for wing fractures, 226
- Barbiturates. *See also Thiobarbiturates.*
injectable, effects of, 249
ultrashort, for anesthesia induction, advantages and guidelines for, 261-264
- Barden's sign, before and after BOP/shelf arthroplasty, 686
in canine hip dysplasia, 556-557
- Barlow's sign, in canine hip dysplasia, 555-556
- Beta-lactam antibiotics, for respiratory infection, 1252
- Beta-receptor agonists, for bronchoconstriction, 1238-1242
- Biceps femoris muscle sling, for canine hip dysplasia, dissenting opinion on, 732-733
rebuttal of, 733
investigations on, differences in, reasons for, 733-734
postoperative results of, client's questionnaire on, 734-735
research trials of, changes following, 734
with femoral head excision, formation of, 731
positioning of, 729
surgical procedure for, 728-732
suturing of, 730
- Biceps reflex, examination of, in spinal disease, 768
- Biliary tract disease, anesthesia for, 479

- Biocompatible osteoconductive polymer.
See BOP.
- Biomechanical forces, distribution of, in BOP/shelf arthroplasty, 693
- Biphase splint, for oral fractures, 115-117 for stifle immobilization, 192
- Birds, fracture repair in, recommendations for, 233-236
- Blastomycosis, of nasal cavity, 1130
- Block vertebra, congenital, 990-991
- Blood flow distribution, and inhalational anesthesia induction and recovery speed, 299
- Blood gas(es), analysis of, arterial, 1088-1091
in anesthetized patient, 429-431
- Blood loss, with cesarean section, 481
- Blood pressure, arterial, monitoring of, in anesthetized patient, 428
with inhalational anesthetics, 303 during progressive hypotension, 305
with injectable anesthetics, 251, 255 in hypovolemic dogs, 253
- intraoperative monitoring of, case against, 446
case for, 444-445
systolic, normal, in anesthetized patient, 427
- Body temperature, normal ranges for, 426
- Body weight, and force distribution, 522
- Bone(s), bending moment in, creation of, 46
forces applied to, biomechanics of, 46-49
fracture of, iatrogenic, in external skeletal fixation, 104
grafting of, for radial/ulnar fractures, 144-145
with external skeletal fixation, 84-85
healing of, biological influences on, 63
principles of, 45-68
with external skeletal fixation, 58-62
lengthening procedures for, external skeletal fixation for, 205
load-deformation curve in, creation of, 48-49
lysis of, with total hip arthroplasty, 713
new growth of, with BOP/shelf arthroplasty, 693-700
remodeling of, following three-plane intertrochanteric osteotomy, for early-stage canine hip dysplasia, 626
resorption of, with total hip arthroplasty, 713, 716
sequestra of, as cause of chronic rhinitis, 1113-1115
in cat mouth, in extraction sites, 1375-1376
torsional moment in, creation of, 47
union of, delayed, in external skeletal fixation, 104
mechanisms of, with external skeletal fixation, 59
- Bone clamps, for external skeletal fixation application, 41
- Bone plating, for humeral fracture, external skeletal fixation with, 128
- Bone scanning, nuclear, for lumbosacral disease, 945
- Bone screws, for external skeletal fixation, 74
- Bone structure, in cat mouth, radiographic abnormalities in, 1293-1294
- BOP (biocompatible osteoconductive polymer), for human orthopedics, 684
new bone growth with, 685
- BOP/shelf arthroplasty, anatomic landmarks in, 687-688
anteroposterior diagram of, 689
case selection for, 685-686
complications in, 693
discussion of, 693-700
early bone formation in, radiograph of, 691
for canine hip dysplasia, 683-701
model of, 690
pre- and postoperative disability with, 692
results of, 690-693
surgical procedure for, 687-690
- Bordetella bronchiseptica*, antimicrobial susceptibilities to, 1177
vaccines against, 1179
- Bordetella* respiratory infections, 1173-1180
antimicrobial treatment of, 1177-1179
association with disease, 1174
diagnosis of, 1176-1177
reservoirs, prevalence, and transmission of, 1174-1175
symptomology, pathology, and pathogenesis of, 1175-1176
vaccination against, 1179-1180
- Brachial plexus avulsion, somatosensory evoked potentials of, 852
- Brachycephalic airway syndrome, 1053, 1145-1153
anesthesia for, 452
diagnostic testing in, 1147, 1149-1150
history of, 1148
physical examination in, 1148-1149
physiology of, 1146-1147
radiography of, 1150
surgery for, 1151-1152
treatment of, 1150-1153
- Brailing, for forearm wing fractures, 228
- Brain tumors, magnetic resonance imaging of, 825

- Breathing circuits, in inhalational anesthesia, 395-403
- Breathing effort, monitoring of, in anesthetized patient, 429
- Breathing rate, monitoring of, in anesthetized patient, 427-428
- Breeder, canine hip dysplasia and, 739-743
- Bridges, parapatular pin composite, for jaw fractures, in small animals, 1461-1467
- Broaches, for feline endodontics, 1438
- Bronchial asthma, feline, clinical presentation and therapeutic considerations in, 1195-1197
- Bronchial diseases, pharmacologic control of, 1253-1255
- Bronchial smooth muscle tone, factors determining, 1232
in dog, 1213
- Bronchial tree, canine, anatomy of, 1212
- Bronchiectasis, in dog, 1211
- Bronchiole, anatomy of, 1046-1047
- Bronchitis, canine, chronic, 1210-1214
antibiotics for, 1224-1225
biopsy of, 1222
bronchodilators for, 1223
cough suppressants for, 1225
glucocorticoids for, 1225-1226
prognosis in, 1226
radioaerosol ventilation scan of, 1221
relationship to tracheal collapse, 1208
tidal-breathing flow-volume loops in, 1220
feline, 1188
clinical presentation and therapeutic considerations in, acute, 1197
chronic, 1197-1198
asthmatic, 1198
with emphysema, 1198-1199
tidal-breathing flow-volume loop in, 1096
- Bronchoalveolar lavage, for cytologic evaluation, 1067-1069
- Bronchodilators, for bronchial diseases, 1254
for canine chronic bronchitis, 1223
for respiratory inflammation, 1237-1247, 1251
for tracheal collapse, 1208-1209
- Bronchopulmonary disease, canine, cytology of, 1217-1218
feline, 1187-1201
clinical presentation and therapeutic considerations in, 1195-1199
diagnostic approach to, 1190-1194
bacterial culture, 1193
cytology, 1193
history, 1190-1191
minimum data base for, 1192-1194
physical examination, 1191-1192
radiography, 1193
pathology and pathophysiology of, 1188-1190
- Bronchoscopy, in canine lower airway disease, 1218-1219
- Bronchovascular bundle, appearance of, 1046
- Bronchus, anatomy of, 1046-1047
- Brown femoral head prosthesis, 704
- Buccostomatitis, in cats, definition of, 1324
- Bulbocavernosus reflex, examination of, in spinal disease, 771
- Bullous diseases, feline oral cavity lesions in, 1329-1330
- Buprenorphine, pharmacokinetic variables for, 246-247
- Butorphanol, for cough, 1249
in dilated cardiomyopathy, 464
in hypertrophic cardiomyopathy, 461
pharmacokinetic variables for, 246-247
- Butterfly vertebra, congenital, radiographic appearance of, 988
- Calcitonin, in feline dental resorptive lesions, 1401
- Calcium, effect on canine hip dysplasia, 534-536
- Calcium hydroxide, for feline dental resorptive lesion repair, 1424
- Calculus, feline, development of, kinetics of, 1316-1317
evaluation of, anesthesia in, 1313
methods for, 1311-1312
results of, 1315-1316
teeth evaluated in, 1312-1313
prophylaxis for, 1313
scoring method for, 1316
- Callus formation, with external skeletal fixation, 61-62
- Calories, effect on canine hip dysplasia, 532-533
- Canal sealants, for feline endodontics, 1439
- Canine distemper, and meningitis/myelitis, 953-954
pulmonary cytology in, 1082
- Canine hip dysplasia, 503-743
abduction-external rotation test for, 649
acetabular, 646-647
alternative therapies for, breeder evaluation of, 741-742
and breeder, 739-743
and degenerative joint disease, 505-508

Canine hip dysplasia (*Continued*)

- angle of reduction/subluxation in, 649-653
- bilateral, 564
 - femoral head remodeling in, 566
 - subluxation in, 565
- biomechanical factors in, 504
- BOP/shelf arthroplasty for, 683-701
- causes of, breeder's information needs in, 740-741
- clinical signs in, 551-558
- control of, role of Orthopedic Foundation for Animals in, 579-593
- development of, radiographic, 559-578
- diagnosis of, 530-531, 647-654
 - frequency of, 722-723
 - subluxation test for, 647-649
 - veterinarian's radiographic experience in, 742
- early stage, signs of, 623
 - three-plane intertrochanteric osteotomy for, 623-643
- environmental influences in, 504, 585-588
- femoral, 645-646
- femoral head and neck excision for, 721-737
 - reasons for, 723
 - selection of procedure for, 723-724
- force analysis in, 517-518
- frequency of, 581-585
 - by breed, 586-587, 589
- genetic predisposition to, 503, 722
- historic review of, 723
- in Orthopedic Foundation for Animals population, clinical observations in, 591-592
- management of, 595-606
 - client's wishes in, 742
 - conservative, 596-598
 - medical, 598-602
 - ascorbate therapy, 598
 - corticosteroids, 601
 - joint fluid modifiers, 601-602
 - nonsteroidal anti-inflammatory drugs, 598-601
 - superoxide dismutase, 602
- orthopedic and neurologic examination in, 552
- pain in, causes of, 509-510
- pathogenesis of, 503-511
- pathology of, 541-550
- pathophysiology of, 596
- pectineus tendon surgery for, 607-621
 - discussion of, 617-620
 - postoperative care in, 617
 - procedure for, 608-617
- pelvic osteotomy for, 645-682
- phenotype distribution by breed, 582-584

- physical changes in, 508-510
- physical diagnosis in, 551-558
 - techniques in, 553-557
- preliminary hip evaluations for, 590-591
- process of, 645-647
- radiographic examination of, 654-660
 - contrast in, 656-657
 - dorsal acetabular rim, 658-660
 - frog view, 655, 658
 - lateral, 655-657
 - ventrodorsal, 654
- reduction of, breeder's role in, 741
 - progress in, 588-590
- registries of, objectives of, 579-580
- role of nutrition in, 529-540
- Sertl shelf arthroplasty (BOP procedure) for, 683-701
- surgical anatomy of, 607-608
- total hip arthroplasty for, 703-719
- Canine hip joint, force modeling in, 523
 - weight and muscle tension in, 525
- Canine leg, rear, anatomic preparation of, 608-609
- Canine tooth, feline, root resorption of, 1369
- Carbohydrates, effect on canine hip dysplasia, 532-533
- Cardiac output, with inhalational anesthetics, 301-302
 - during progressive hypotension, 304
 - with injectable anesthetics, 250, 254
 - in hypovolemic dogs, 252
- Cardiomyopathy, anesthetic concerns in, 460-465
- Cardiovascular monitoring, of anesthetized patient, 425-428
- Cardiovascular parameters, normal ranges for, 426
- Carpometacarpal fractures, avian, repair of, 235
- Cartilage, defects of, in canine hip dysplasia, 543-549
 - erosion of, 543-544
 - resilience of, 542
 - response to injury, 542
 - structure-function relationship of, 541-542
- Cartilaginous exostoses, 998
- Cat(s), brachycephalic head type in, malocclusion in, 1455
 - bronchopulmonary disease in, 1187-1201
- dental abnormalities in, treatment of, 1304-1306
- dental evaluation in, 1299-1300
 - methods of, 1318
- dental occlusion in, 1269
- dental prophylaxis in, 1300-1303
- dental radiography in, 1303-1304

- dental resorptive lesions in. See *Dental resorptive lesions*.
- dolichocephalic head type in, malocclusion in, 1456
- endodontics in, 1433-1451. See also *Endodontics*.
- gingivitis in, 1361-1383. See also *Gingivitis*.
- malocclusion in, 1453-1460. See also *Malocclusion*.
- normal jaw of, radiographic structures in, 1290
- normal occlusion in, 1454
- oral cavity of, anatomy of, 1265-1277
- inflammatory diseases of, 1323-1345
- oral-dental disease in, 1297-1307
- oral-dental radiographic examination, interpretation in, 1279-1295
- oral immunity in, 1324-1329. See also *Oral immunity*.
- oral infections in, 1331-1337
- bacterial, 1336
- fungal, 1337
- mycetomas, 1337
- mycoplasmal, 1336-1337
- viral, 1331-1336
- oral inflammatory cell infiltrates in, 1328-1329
- periodontal tissue in, 1271-1273
- stomatitis in, 1361-1383. See also *Stomatitis*.
- tooth structure in, 1269-1271
- Cathepsins, in degenerative joint disease, 506
- Cauda equina, abnormalities of, somatosensory evoked potentials in, 846, 848-849
- Cement disease, with total hip arthroplasty, 714
- Cementum, feline, 1272-1273
- active resorption of, 1395
- Central nervous system, disease of, IgG index in, 803
- serum and cerebrospinal fluid titers for, 804
- drug-induced changes in, 436
- Central venous pressure, monitoring of, in anesthetized patient, 428
- Cephalosporins, for gram-negative respiratory infection, 1252
- Cerebral somatosensory evoked potentials, abnormalities of, 849-851
- Cerebrospinal fluid, albumin in, 796-801
- analysis of, 781-810
- collection sites for, 783-784
- cytologic abnormalities in, 786-796
- differential diagnosis in, 788
- for spinal neoplasms, 979
- parameters and normal findings in, 782
- total cell count in, effect of blood contamination on, 784-785
- variability of results in, 783-784
- white blood cell counts in, 785-786
- antigen-antibody titers in, serum titers vs, 803-807
- cultures of, 802-803
- miscellaneous tests of, 807
- organisms and tumor cells in, 795-796
- protein electrophoresis of, 796-801
- total protein in, 796-801
- Cervical line lesions, dental, in cat, 1385, 1389
- and endodontic disease, 1435
- Cervical spine, fracture/luxation of, locking screw plate for, 879
- management of, 878-879
- intervertebral disc disease of, surgical treatment of, 900-905
- dorsal decompression, 903-905
- fenestration, 900-901
- ventral decompression (slotting), 901-903
- Cervical vertebral malformation/malarticulation syndrome, in large dogs, 923-935
- abnormal vertebral development in, 924-925
- degenerative changes in, 925
- diagnosis of, 926-927
- history in, 926
- intervertebral disc failure in, 925-926
- laboratory data in, 926
- neurologic examination in, 926
- pathoanatomic considerations in, 923-926
- physical examination in, 926
- radiographic examination in, 926-927
- stabilization of, 931-932
- treatment of, 928-932
- dorsal decompression, 929
- nonsurgical, 928
- prognosis in, 933-934
- surgical, 928-929
- postoperative care in, 932
- ventral decompression, 930-932
- ventral fenestration, 929-930
- vertebral and spinal cord changes in, 927
- Cesarean section, anesthesia for, in cat, 484-486
- in dog, 481-484
- Charnley compression clamps, for transarticular external skeletal fixation, 182-183
- Cheeks, in cat, 1273
- Cheilitis, in cats, definition of, 1324
- Chondrocytes, changes in, in degenerative joint disease, 547-548
- Cimetidine, with cesarean section, 481

- Circle anesthetic system, diagram of, 401
 fresh gas flow with, 381-382
- Circular fixators, for external skeletal fixation, 31-33
- Clamps, of external fixators, 12
- Clavicular-furcular fractures, avian, repair of, 233
- Client compliance, failure of, in pelvic osteotomy, 681
- Codeine, for pain management, 361
- Composite resins, for feline endodontics, 1440
- Computed tomography, for lumbosacral disease, 946
 for spinal neoplasms, 979
 of spinal canal lesions, 826-827
 of spine, 823-827
- Condensers, for feline endodontics, 1440
- Congestive cardiomyopathy, anesthesia in, 462-464
- Connecting rods, for external skeletal fixation, 12
 for optimal healing, 65-66
 for Kirschner apparatus application, 38
- Contact healing, with external skeletal fixation, 60
- Coracoid fractures, avian, repair of, 233
- Coronal bone, in cat mouth, radiographic abnormalities in, 1293
- Corticosteroids, for canine hip dysplasia, 601
 for chronic feline gingivitis/stomatitis, 1376
 for spinal trauma, 870
 precautions when using, 370
- Cough, as respiratory defense mechanism, 1233
 causes of, 1156
 suppressants for, for canine chronic bronchitis, 1225
 with laryngeal inflammation, 1158
- Coxofemoral joints, anatomy of, 721-722
 biomechanical improvement in, following intertrochanteric osteotomy, 627
 subluxation of, in early-stage canine hip dysplasia, 624
- Cranial nerves, examination of, in spinal disease, 765
- Cranial tibial reflex, examination of, in spinal disease, 766
- Crepitation, before and after BOP/shelf arthroplasty, 686
- Cromoglylate, for respiratory inflammation, 1245-1246
- Cross-breeding, in cats, and malocclusion, 1454
- Crossed extensor reflex, examination of, in spinal disease, 769
- Cryptococcosis, nasal, 1124-1128
 cytologic specimen of, 1127
 radiography of, 1126
 of feline oral cavity, 1337
- Curariform relaxants, as neuromuscular blocking agents, 342
- Currettes, for external skeletal fixation application, 41
- Cutaneous trunci reflex, examination of, in spinal disease, 772-773
- Cyanosis, anesthesia for patients with, 454-455
- Cyclopropane, minimum alveolar concentration of, 300
 partition solubility coefficients of, 298
 physicochemical characteristics of, 298
- Cytokines, effect on osteoclast formation and resorption, 1399
- Cytologic evaluation, of respiratory tract, 1065-1085
- Dead space, in circle anesthetic system, 400-401
- Debilitation, systemic, severe, anesthesia in, 491-494
- Decongestants, for respiratory disease, 1243, 1249-1250
- Degenerative joint disease, with canine hip dysplasia, selection of procedure for, 723-724
- Degenerative myelopathy, 965-971
- Dehydration/hypovolemia, patients with, anesthesia for, 495-496
- Delayed hypersensitivity reaction, in feline gingivitis/stomatitis, 1365
- Dens, malformations of, congenital, 992-995
 clinical signs of, 993-994
 diagnosis of, 994-995
 treatment of, 995
- Dental disease, chronic rhinitis and, 1101-1117
- Dental evaluation, in cats, 1299-1300
 methods of, 1318
- Dental occlusion, in cats, 1269
- Dental plaque, feline, development of, kinetics of, 1314-1315
 soft vs hard diet in, 1314-1315
 evaluation of, anesthesia in, 1313
 methods for, 1311-1312
 results of, 1313-1315
 teeth evaluated in, 1312-1313
 prophylaxis for, 1313
 scoring method for, 1313
- Dental prophylaxis, in cat, 1300-1303
 getting started in, 1306
 in gingivitis/stomatitis, 1374
 recall program for, 1306
- Dental radiography, in cats, 1303-1304
- Dental record, feline, 1301

- Dental resorptive lesions, feline, **1385-1404**
 breed, age, and sex in, 1407
 clinical surveys of, 1405-1414
 summary of, 1406
 Veterinary Hospital of the University of Pennsylvania, 1413-1414
 Weesp (Netherlands), 1405-1413
 discussion of, 1414-1415
 gingival inflammation/proliferation with, 1409-1413
 gross findings in, 1386-1387
 histopathology of, 1386-1396
 in Netherlands, 1409-1413
 in United States, 1413-1414
 location in mouth, 1409-1411
 odontoclastic, subgingival, **1417-1432**
 classification of, 1418-1421
 discussion of, 1430-1431
 restoration results in, 1426-1430
 treatment of, 1421-1426
 stage 1, 1422-1423
 stage 2, 1423-1425
 stage 3, 1425
 stage 4, 1425-1426
 pathologic changes in, 1387-1396
 possible pathogenesis of, 1396-1402
 prevalence patterns of, **1405-1416**
 in Netherlands, 1408, 1411-1412
 pulp exposure in, 1409-1413
 simultaneous resorption and repair in, 1392-1393
 surface pits with, 1387, 1390
 systemic factors in, 1400-1402
- Dental x-ray film ultraspeed, for cats, 1280-1281
- Dentin, destruction of, with feline dental resorption, 1391
- Dentistry, feline, **1265-1467**
 in general practice, client education in, 1298-1299
 relevance of, 1297-1298
 preventive, 1316-1317
- Dentition. See also *Tooth (teeth)*.
 in cat, deciduous, 1267
 permanent, 1266-1267
- Dermatophilosis, of feline oral cavity, 1336
- Desflurane, potential uses of, 335-337
- Dextromethorphan, for cough, 1249
- Diaphragmatic hernia, severe dyspnea with, anesthesia for, **456-459**
 plan for, 457-458
 recovery from, 458
 cardiopulmonary status in, 456
 patient monitoring in, 458
 preanesthetic treatment of, 456-457
- Diazepam, cardiovascular response to, 254-256
 in dilated cardiomyopathy, 464
 pharmacokinetic variables for, 246-247
- Diethyl ether, minimum alveolar concentration of, 300
 partition solubility coefficients of, 298
 physicochemical characteristics of, 298
- Dilated cardiomyopathy, anesthesia in, 462-464
- Disc material, role in fibrocartilaginous emboli, 1019
- Discography, for lumbosacral disease, 945
- Diskospondylitis, **1027-1034**
 antimicrobial therapy for, 1032-1033
 clinicopathologic abnormalities in, 1029
 diagnosis of, 1029-1031
 etiopathogenesis of, 1027-1029
 foreign bodies and, 1028
 grass awn-associated, surgical removal of, 1032
 hematogenous spread of, 1027
 radiographic appearance of, 1030
 therapy for, 1031-1033
 trauma and, 1029
- Distemper, canine, and meningitis/myelitis, 953-954
 pulmonary cytology in, 1082
- Diuretics, for intracranial hypertension, 487
- Doberman Pinschers, thoracic vertebral stenosis in, 1006-1010
- Dog, chronic tracheobronchial disease in, **1203-1229**
- Dorsal acetabular rim radiographic view, of canine hip dysplasia, 658-660
 mild, 662
 moderate, 663
 severe, 665
 of normal hip joint, 661
- Dorsal metacarpal nerves, somatosensory evoked potentials in, 842
- Dorsal spinal plates, for lumbar vertebral fracture, 172
- Double bar external fixation device, 14
- Double clamp external fixation device, 14
- Double connecting clamp, for Kirschner apparatus, 22
- Doxacurium, as neuromuscular blocking agent, 343-344
- Doxapram, as respiratory stimulant, 1249
- Drill(s), for external skeletal fixation, 36-37
 for optimal bone healing, 66
- Droperidol, in dilated cardiomyopathy, 464
- Dynamization, of external skeletal fixation, 84-85, 90, 93, 145
- Dyspnea, causes of, 1155
- EACA, for degenerative myelopathy, 969

- Economics, of anesthesia gas flow rate, 384-386
- Ehmer reduction gear, 7
- Electrocardiographic monitoring, intraoperative, case against, 440-443
 case for, 437-440
 conditions revealed by, 438-439
 new technology in, 439
 practical aspects of, 437-438
- Electrodiagnostic examination, 833-857
 of spinal neoplasms, 976-979, 981
- Electroimmunodiffusion, for cerebrospinal fluid protein, 798
- Electrolyte balance, effect on canine hip dysplasia, 536-537
- Electrolyte imbalances, intraoperative, electrocardiographic monitoring of, 438-439
- Electromechanical dissociation, intraoperative, electrocardiogram failure in, 441
- Electromyography, in spinal cord disease
 diagnosis, 853-855
 of larynx, 1157
- Electrophysiologic studies, for lumbosacral disease, 946
- Ellis pin, for external skeletal fixation, 73
- Embryonal arteries, persistence of, and fibrocartilaginous emboli, 1019
- Emphysema, in dog, 1210
- Encephalitis, cerebrospinal fluid analysis in, 791
 cerebrospinal fluid antigen-antibody titers in, 804-807
- Encircling tape bandage, for avian fractures, 227
- Endodontic disease, as cause of chronic rhinitis, 1109-1113
 in cat, 1434-1436
- Endodontics, feline, 1433-1451
 amputation and pulp capping in, 1448-1450
 complications of, 1442-1444
 contraindications to, 1437
 home care/aftercare and follow-up in, 1442
 instrumentation for, 1437-1440
 materials for, 1438
 options for, 1436-1437
 surgical, 1444-1448
 instruments for, 1445-1447
 materials for, 1447
 technique of, 1447-1448
 technique of, 1440-1442
- Energy conservation, anesthesia gas flow rate and, 386
- Enflurane, advantages and guidelines for, 326
 cardiovascular effects of, 302-303
 during progressive hypotension, 304-305
 dose calculations for, 407-408
 minimum alveolar concentration of, 300
 partition solubility coefficients of, 298
 physicochemical characteristics of, 298
 precautions when using, 327-328
- Enilconazole, for nasal aspergillosis, 1124
- Eosinophilia, in cerebrospinal fluid
 analysis, differential diagnosis of, 788, 792-793
- Eosinophilic granulomas, oral, in cat, 1342
- Ependymoma, of spinal cord, myelography of, 977
- Ephedrine, for bronchoconstriction, 1238-1239, 1247
- Epidural anesthesia, 413-423
 definitions and semantics in, 413-414
 effects of, 415
 for cesarean section, 482
 for surgery, advantages and guidelines for, 421-423
 problems and precautions with, 420-421
 lumbosacral, 417-419
- Epidurography, for lumbosacral disease, 943-944
 for spinal neoplasms, 979
- Epinephrine, for bronchoconstriction, 1238-1239
 for canine chronic bronchitis, 1224
- Etomidate, as anesthetic agent, advantages of, 277-280
 cardiovascular response to, 251
 in dilated cardiomyopathy, 464
 in hypertrophic cardiomyopathy, 461
 pharmacokinetic variables for, 246-247
 precautions when using, 280-281
- Exercise, controlled, for canine hip dysplasia, 597
 vigorous, and fibrocartilaginous emboli, 1019
- Exhalation, forced, airway pressures during, 1055
- Expectorants, for cough, 1247-1249
- Extension, forced, in canine hip dysplasia, 553
- Extensor carpi radialis reflex, examination of, in spinal disease, 767
- Extensor thrust reflex, examination of, in spinal disease, 762-763, 770-771
- External fixators, application of, 69-97
 essential concepts in, 70-85
 general, 85-96
 surgeon's knowledge of, 70
 clamps for, 12
 classification of, 11-18
 cleaning of, 84
 design of, 71-72

- dynamization of, 84-85, 90, 93, 145
 effect of activity on, 70-71
 effect of inflammation on, 70
 elements of, 11-12
 failure of, factors contributing to, 70
 frame configuration of, 13-16
 loads applied to, origins of, 45-46
 motion prevention with, 70
 nomenclature of, 11-18
 pins and pin technique of, 72-78
 postoperative management of, 69-97
 problems with, 102-104
 sliding guide pin-gripper for, 78
 staged removal of, 84-85, 90, 93, 145
 stiffness and strength of, 49-55
 types of, 13
- External skeletal fixation, acrylic-pin
 splints for, 24-31
 angled vs parallel pin fixation in, 54
 application instrumentation for, 35-42
 bilateral, 15, 142
 biomechanics of, 45-68
 biplanar, 15, 141
 bone healing with, 58-62
 circular fixators for, 31-33
 complications of, 99-107
 connecting rods for, 54-55
 decreased patient morbidity in, 63-66
 delayed bone union in, 104
 devices for, 19-34
 sources of, 20
 failure of, mechanisms of, 55-58
 fixation instrumentation for, 35-39
 for avian fractures, 225-238
 for femoral fractures, 144-159. See also *Femur*.
 for growth deformities, 209-223
 for humeral fractures, 121-133. See also *Humerus*.
 for oral fractures, 112-117. See also *Oral fractures*.
 for radial/ulnar fractures, 135-148. See also *Radius/ulna*.
 for tibial fractures, 161-170. See also *Tibia*.
 for vertebral fractures and luxations, 171-180
 frame configuration in, 55
 history of, 1-10
 early guidelines and complications, 7-8
 in human orthopedics, 1-3
 in veterinary orthopedics, 3-7
 human systems for, 33-34
 instrumentation for, 19-43
 Kirschner apparatus for, 19-24
 load-sharing in, 50-51
 orthopedic instrumentation and equipment for, 39-42
 pins for, 51-54
 postoperative management of, for optimal healing, 66
 pressure necrosis of skin in, 103-104
 transarticular application of, 181-194
 configurations of, 182-183
 overview of, 181-184
 unilateral, 14-15
 unstable configurations of, 103
- Facial granulomas, with nasal cryptococcosis, 1125
- Fatigue life curve, of fixation pins, 58
- Faucitis, of domestic cats, 1347-1360
 chronic, feline calicivirus in, 1334-1335, 1357
 studies of, discussion of, 1354-1359
 materials and methods for, 1348-1349
 results of, 1350-1354
- Fecal function, examination of, in spinal disease, 772
- Feed consumption, effect on canine hip dysplasia, 531-532
- Feline bronchopulmonary disease, 1187-1201. See also *Bronchopulmonary disease, feline*.
- Feline calicivirus, contact exposure to, clinical signs of, 1353
 electron photomicrograph of, 1351
 in chronic ulceroproliferative faucitis, 1334-1335, 1348, 1357
 infection with, experimental, clinical evaluation of, 1351
 clinical signs of, 1352
 mucosal and submucosal tissue in, 1356
 serum neutralizing antibody response in, 1356
 virus isolation following, 1351-1355
 oral infection in, 1333-1335
 toxic oral cavity lesions vs, 1331
 isolation of, in oral cavity disease, 1350
- Feline dental record, 1301
- Feline dental tissue, normal, histologic characteristics of, 1386, 1388-1389
- Feline dentistry, 1265-1467
- Feline endodontics, 1433-1451
- Feline herpesvirus, type 1, and oral infections, 1335
- Feline immunodeficiency virus, and oral disease, 1327-1328, 1332-1333
- Feline infectious peritonitis, and meningitis/myelitis, 954-955
 and oral infections, 1335-1336
- Feline leukemia virus, and oral infections, 1332
- Feline malocclusion, 1453-1460
- Feline scaler/currette kit, 1302

- Feline syncytium-forming virus, and oral infections, 1333
- Feline urethral obstruction, anesthesia for, 475-478
 anesthetic management of, 476-477
 post-anesthetic management of, 477
- Femoral head, anatomy of, 721-722
 center of, determination of, 628-629
 damage to, in canine hip dysplasia, 508-509
 excision of, for canine hip dysplasia, 721-737
 in dogs under 20 kg, approaches to, 727
 surgical plan for, 724-728
 positioning for, 725-726
 preparation for, 725
 remodeling of, in bilateral canine hip dysplasia, 566
 subluxation of, in canine hip dysplasia, 518
- Femoral neck, angle of inclination of, determination of, for intertrochanteric osteotomy, 626-628
 excision of, for canine hip dysplasia, 721-737
 positioning for, 725-726
 preparation for, 725
 lengthening of, with pelvic osteotomy, 679, 681
 osteophytes of, as contraindication to pelvic osteotomy, 666-667
 short, pelvic osteotomy for, 664-666
- Femur, anatomy of, and external skeletal fixation problems, 89-90
 anteversion of, 634
 axial radiography of, 632-633
 determination of, for intertrochanteric osteotomy, 629-630
 avian, fracture of, repair of, 230, 235
 axial radiography of, 631-632
 exposure of, for three-plane intertrochanteric osteotomy, 634
 forces acting on, 523, 646-647
 fractures of, 144-159
 anatomy and general considerations in, 150-151
 external skeletal fixation of, 156-157
 application of, 152
 complications of, 157-158
 indications for, 151-152
 method of application of, 153-156
 postoperative care of, 156-157
 preoperative considerations in, 152-153
 tie-in configuration for, 155
 unilateral, 85-88
 unilateral-biplanar, 88-91
 intramedullary pin fixation of, 153
 stabilization of, 92
 malunion of, pelvic osteotomy for, 666
 preparation of, for total hip arthroplasty, 711
 proximal, development of, normal, 560
 with intertrochanteric drill/saw guides, 635
- Fentanyl, in dilated cardiomyopathy, 464
 pharmacokinetic variables for, 246-247
- Fibrillation, in degenerative joint disease, 506, 508
- Fibrocartilaginous emboli, 1017-1026
 diagnosis in, 1023-1024
 incidence of, 1020-1022
 mechanisms of, 1019
 neurologic examination of, 1022-1023
 pathophysiology of, 1017-1020
 patient presentation in, 1022-1023
 prognosis in, 1024-1025
 signalment of, 1020-1022
 source of, 1017-1020
 treatment of, 1024
- Fibroid metaplasia, 891
- Field potentials, in somatosensory evoked potentials, 840
- Figure-of-eight bandage, for wing fractures, 228
- Files, for feline endodontics, 1438-1439
- Film composition, of intraoral radiographs, in cats, 1285-1286
- Film processing, of intraoral radiographs, in cats, 1285-1287
- Fixation pins, 11
 diameter of, for optimal healing, 65
 fatigue failure of, and implant failure, 57-58
 for Kirschner apparatus, 23-24, 39
 insertion of, 75-78
 for femoral fractures, 154
 for radial/ulnar fractures, 139-140
 soft-tissue considerations and management after, 78-84
 loosening of, premature, and implant failure, 55-57
 with external skeletal fixation, 103
 prevention of, 77
 number of, for optimal healing, 64
 placement of, 76
 for optimal healing, 65
 relation to surgical wound, 79-80
 positioning of, 80
 prestress of, 76-77
 types of, 72-75
 for optimal healing, 66
- Flaking, in degenerative joint disease, 508
- Flexor reflexes, examination of, in spinal disease, 768-769
- Flow-volume curves, in pulmonary function testing, 1092-1094
- Flow-volume loop(s), 1055-1057
 expiratory, maximal, 1056

- tidal-breathing, 1057
 in chronic bronchitis, 1220
 in healthy animals, 1094
 in tracheal collapse, 1207
 values and indices in, 1095
- Fluconazole, for nasal cryptococcosis, 1128
- Fluid administration, for intracranial hypertension therapy, 489
 intraoperative, case against, 448-450
 case for, 447-448
- Flumazenil, potential uses of, 285-286
- Flunixin meglumine, precautions when using, 372
- Foramen magnum, keyhole dorsal notch of, congenital, 996
- Foramen triosseum fractures, avian, repair of, 233
- Force, in canine hip joint, equations for, 524-526
- Force plate analysis, of gait, 521-522
- Forceps, for feline endodontics, 1438
- Foreign body lesions, oral, in cat, 1341-1342
- Forelimbs, somatosensory evoked potential stimulation in, 841-843
- Fracture(s), avian, 225-238
 coaptation splinting of, 225-229
 evaluation of, 225
 recommendations for repair of, 233-236
 comminuted, stabilization of, 89
 delayed union of, 195-207
 external skeletal fixation of, 202-206
 in feline tooth, and endodontic disease, 1435
 interpretation of, 1290-1291
 restoration of, technique of, 1440-1442
 nonunion of, 195-207
 external skeletal fixation of, 203-204, 206
 open, 195-207
 cleaning of, 198
 external skeletal fixation of, 199-202
 preliminary management of, 195-197
 treatment of, definitive, 198-199
 initial, 197
 reduction of, and external skeletal fixation application, 80
 with total hip arthroplasty, 715-716
- Frame stiffness, maximization of, for optimal healing, 65-66
- Frenula, in cat, 1273
- Fresh gas flow, in anesthesia, 381-387
- Frog radiographic view, of canine hip dysplasia, 574, 655, 658
 mild, 662
 of normal hip, 661
- Frontal sinus, dorsoventral radiograph of, 1136
- Fungal diseases, of nasal cavity, 1119-1132
- Fungal encephalitis, cerebrospinal fluid antigen-antibody titers in, 806-807
- Fungal infections, systemic, and meningitis/myelitis, 960-961
- Gait, abnormalities of, in canine hip dysplasia, 553-554
 with spinal cord dysfunction, 757
- Gamma globulins, in cerebrospinal fluid protein determination, 799
- Gap healing, with external skeletal fixation, 60
- Gas flow, in anesthesia, fresh, 381-387
 high, case for, 383-384
 low, case for, 384-387
 rates of, with mask anesthesia induction, 311
- Gastric dilatation/volvulus, anesthesia for, 471-474
 induction in, 473
 maintenance in, 473-474
 postoperative management of, 474
 preanesthetic management of, 471-472
 preanesthetic medication for, 472-473
- Gastric volvulus, anesthesia for, 471-474.
 See also *Gastric dilatation/volvulus*.
- Gastrocnemius reflex, examination of, in spinal disease, 767
- Gauthier pin, for external skeletal fixation, 73-74
- General anesthesia, for cesarean section, 482-483
- Gingiva, in cat, 1271
 hyperplastic, 1370
- Gingivectomy, for feline juvenile hyperplastic gingivitis, 1374
- Gingivitis, definition of, 1101-1102
 in cats, 1361-1383
 acute necrotizing ulcerative, 1336
 bone loss in, 1373
 chronic, 1372
 clinical syndromes of, 1370-1372
 definition of, 1324
 dental plaque and, 1311
 description and etiopathogenesis of, 1361-1363
 feline calicivirus and, 1334, 1354, 1359
 in subgingival odontoclastic resorptive lesions, 1417
 juvenile onset, 1370-1371
 lymphocytic-plasmacytic infiltration in, 1362
 pocket formation in, 1373
 simple, 1362
 treatment of, 1305, 1338-1339
 regimens for, 1372-1377

- Glass ionomer restoratives, for feline dental resorptive lesion repair, 1424, 1429
 further resorption under, 1426
 gingival reaction to, 1427
 loss of, 1427-1428
 results following, 1430
 root destruction in, 1428
- Glossitis, in cats, definition of, 1324
- Glucocorticoids, for bronchial diseases, 1254
 for canine chronic bronchitis, 1225-1226
 for feline dental resorptive lesions, 1401
 for respiratory disease, 1238, 1242, 1244-1245, 1251
- Glycopyrrolate, for bronchoconstriction, 1243
- Gorman total hip prosthesis, 704
- Growth deformities, external skeletal fixation treatment of, 209-223
- Growth factors, effect on osteoclast formation and resorption, 1399
- Growth rate, manipulations of, 529-530
- Guaifenesin, for cough, 1248-1249
- Guanine monophosphate, cyclic, and bronchial smooth muscle tone, 1232
- Gutta percha, for feline endodontics, 1439
- "Half axial" radiographic view, of canine hip dysplasia, 574-575
- Halothane, advantages and guidelines for, 321-322
 cardiovascular effects of, 302-303
 during progressive hypotension, 304-305
 in hypovolemic dogs, 252-253
 dose calculations for, 407-408
 for small animals, cost of, 402
 in dilated cardiomyopathy, 464
 in hypertrophic cardiomyopathy, 461
 minimum alveolar concentration of, 300
 partition solubility coefficients of, 298
 physicochemical characteristics of, 298
 precautions when using, 323-325
- Head trauma, anesthesia for, 452, 486-491
 plan for, 489
 recovery from, 490
 pathophysiology of, and intracranial hypertension, 486-487
 patient evaluation in, 488
 patient monitoring in, 489-490
- Heart rate, monitoring of, in anesthetized patient, 425-427
- Heart rhythm, monitoring of, in anesthetized patient, 426-427
- Hemilaminectomy, for spinal compression, 917-920
- Hemistand, in spinal disease, 762-763
- Hemivertebra, congenital, 986-989
- Hemiwalk, in spinal disease, 762
- Hemorrhage, in external skeletal fixation, 105
- Hepatocellular disease, primary, anesthesia for, 479
- Hip, arthroplasty of, total, for canine hip dysplasia, 703-719. See also *Total hip arthroplasty*.
 biomechanics of, 513-528
 canine, dysplasia of, 503-743. See also *Canine hip dysplasia*.
 conformation of, in canine hip dysplasia, 573-574
 development of, dysplastic, 561-563
 normal, 559-560
 dislocation of, pelvic osteotomy for, 664
 dynamic analysis of, 521-527
 forces acting on, 515, 517, 520
 inclination angle of, measurement of, 516
 moment of, 516
 normal, mature, 560-561
 radiographs of, 661
 radiographic evaluation of, 563-575
 reference planes for, 514
 static analysis of, 514-520
 subluxation of, in canine hip dysplasia, 519, 565
- Histamine, as mediator in airway disease, 1061, 1234-1235
- Histoplasmosis, of nasal cavity, 1130
- Hopping, in spinal disease, 761-762
- Horses, chronic pain in, acupuncture for, 378
- Host-bacterial interaction, in feline dental resorptive lesions, 1398-1400
- Howmedica porous coated cementless total hip prosthesis, 706
 postoperative radiograph of, 710
- Human dental models, animals as, 1310-1311
- Humeroradial joint, luxation of, external skeletal fixation for, 218-219, 221
- Humerus, anatomy of, and external skeletal fixation problems, 89-90
 avian, fractures of, repair of, 233-234
 fractures of, 121-133
 external skeletal fixation for, complications of, 132
 for stabilization, 123-131
 general principles of, 122-123
 indications for, 123-132
 middiaphyseal, 129-131
 open diaphyseal, 131-132
 supracondylar, 123-128
 unilateral, 85-88
 unilateral-biplanar, 88-91
 fixator types for, 121-122

- Humidification, and rebreathing circuits, 401
- Hyaluronic acid, for canine hip dysplasia, 602
- Hydrocodone bitartrate, for canine chronic bronchitis, 1225
for cough, 1249
for tracheal collapse, 1208
- Hyperesthesia, testing for, in spinal disease, 773-774
- Hyperkalemia, in cat, electrocardiogram with, 476
- Hypersensitivity, and tissue destruction, in feline gingivitis/stomatitis, 1365-1366
- Hypertrophic cardiomyopathy, anesthesia in, 460-462
suitable drugs in, 461
- Hypervitaminosis A, in feline dental resorptive lesions, 1401
- Hypochondroplastic bone dysplasia, 891
- Hypoesthesia, testing for, in spinal disease, 773-774
- Hypotension, with inhalational anesthetics, 306
- Hypovolemia, patients with, anesthesia for, 495-496
- Ibuprofen, for canine hip dysplasia, 600
- IgG index, in cerebrospinal fluid, 801-802
- Iliac osteotomy, 668
closure of, 675
guide pin placement in, 672, 674
incisions for, 672-673
surgical procedure for, 670-676
- IMEX pin, for external skeletal fixation, 73-74
- Immune defenses, in cats, oral, 1324-1329
- Immunodeficiency, in cats, and oral disease, 1326-1328
in dental resorptive lesions, 1400-1401
in feline gingivitis/stomatitis, 1363-1365
in periodontitis, 1340
- Immunoelectrophoresis, for cerebrospinal fluid protein, 798
- Immunoglobulins, in cerebrospinal fluid, 801-802
- Infectious peritonitis, feline, and meningitis/myelitis, 954-955
- Inflammation, chronic, and feline root resorption, 1367
idiopathic, and meningitis/myelitis, 955-957
- Inflammatory cell infiltrates, oral, in cat, 1328-1329
- Inhalation therapy, for respiratory disease, 1250-1251
- Inhalational anesthesia, 297-339
breathing circuits in, 395-403
concentration of, and induction and recovery speed, 299
for small animals, cost of, 402
general anesthesia maintenance with, 312-313
minimum alveolar concentration of, 300
new, potential uses of, 335-339
partition solubility coefficients of, 298
physicochemical characteristics of, 298
- Injectable anesthesia, 245-296
for quantitative anesthesia delivery, 406
general anesthesia maintenance with, 275-277
new, potential uses of, 281-289
pharmacokinetic variables for, 246-247
uptake and distribution of, 245-258
- Insect bites, and laryngeal inflammation, 1159
- Intertrochanteric osteotomy, three-plane, for early-stage canine hip dysplasia, 623-643
determination of osteotomy lines in, 630
discussion of, 640-642
drill equipment for, 634-635
first cut in, 636
hook plate for, 630
indication for, 624-626
postoperative care in, 639
postoperative view of, 625-626, 638, 642
preoperative planning for, 626-633
results of, 639-640
second cut in, 637
surgical procedure for, 633-639
timing of, 640
- Intervertebral disc, development of, 891
extrusion of, 861
herniation of, 892-893
protrusion of, somatosensory evoked potentials in, 854
- Intervertebral disc disease, 889-897
anatomy in, 889-891
clinical signs of, 893-894
conservative management of, 895-896
corticosteroids for, 896
immobilization for, 895
surgical treatments for, 899-915
- Intracranial pressure, effect of drugs on, 488
with head trauma, control of, 487-488
- Intramedullary pin fixation, for femoral fractures, 144
for long bone fractures, 85-94
- Intraoral radiographs, feline, 1280-1281
film processing in, 1285-1287

- Intraoral radiographs (*Continued*)
 incorrect angulation in, 1286
 interpretation of, 1289-1295
 techniques of, 1281-1283, 1285
 troubleshooting errors in, 1288-1289
 x-ray beam angulation in, 1283-1285
- Iohexol, for spinal myelography, 818
- Iopamidol, for spinal myelography, 818
- Ipratropium bromide, for
 bronchoconstriction, 1243
- Ischial osteotomy, 668
- incisions for, 671
- surgical procedure for, 670
- Isoflurane, advantages and guidelines for, 328-331
- cardiovascular effects of, 302-303
 during progressive hypotension, 304-305
 dose calculations for, 407-408
 for small animals, cost of, 402
 in dilated cardiomyopathy, 464
 in hypertrophic cardiomyopathy, 461
 minimum alveolar concentration of, 300
 partition solubility coefficients of, 298
 physicochemical characteristics of, 298
 precautions when using, 332-334
- Isopterenol, for bronchoconstriction, 1238-1239
 for canine chronic bronchitis, 1224
- Itraconazole, for nasal aspergillosis, 1124
 for nasal cryptococcosis, 1128
- during progressive hypotension, 304-305
 in hypovolemic dogs, 252-253
 depth of anesthesia with, 434
 epidural, effects of, 415
 general anesthesia maintenance with, 276
 in dilated cardiomyopathy, 463-464
 pharmacokinetic variables for, 246-247
- Ketoconazole, for nasal aspergillosis, 1124
 for nasal cryptococcosis, 1127
 for respiratory fungal infection, 1253
- Kirschner apparatus, double connecting
 clamp for, 22
 for external skeletal fixation, 19-25
 hardware for, 21
- Kirschner-Ehmer splint(s), 7
 for avian fractures, external fixators for,
 placement of, 232-233
 types of, 230-232
 indications and complications of, 229-230
- for oral fractures, 112-113
 for transarticular external skeletal fixation, 182-183, 185-189
 connecting rods with, 185-189
 for wing fractures, 229-233
 transelbow, 188
 transstifle, 187-188
 transtarsal, 189
- Knuckling, as test of proprioception, 759
- Jaw fractures, in small animals, treatment
 of, 1461-1467
 anesthesia for, 1462
 materials and methods for, 1461-1462
 results in, 1466
 technique of, 1462-1465
- Joint disease, degenerative, bone loss in, 507
 bone theory of, 506
 canine hip dysplasia and, 505-508
 cartilage theory of, 505-506
 histologic changes in, 507
- Joint fluid modifiers, for canine hip
 dysplasia, 601-602
- Kennel cough, and laryngitis, 1158
- Ketamine, anesthesia induction with,
 advantages and guidelines for, 266-267
 precautions when using, 268-269
 cardiovascular effects of, 250-251, 254-256
- Lameness, in canine hip dysplasia, 552
- Laminectomy, dorsal, for spinal
 compression, 920-921
- Larynx, abscess of, 1159
 congenital malformation of, 1158
 diseases of, 1155-1172
 clinical examination in, 1156-1158
 inflammation of, 1158-1160
 oral view of, 1157
 paralysis of, 1157, 1164-1171
 cricoarytenoid ankylosis and, 1169
 electromyography of, 1167-1168
 endoscopic view of, 1165-1166
 muscular causes of, 1169
 neurologic causes of, 1165-1169
 neuromuscular disease and, 1169
 surgical repair of, 1169-1171
 polyps of, removal of, 1162-1164
 spasm of, 1160
 trauma to, 1171
 tumors of, 1160-1164
 webbing of, 1170
- Lateral radiograph, of canine hip
 dysplasia, mild, 662
 moderate, 663
 severe, 665

- Left ventricular muscle, electromyography of, 167
- Leukotrienes, as mediators in airway disease, 1061-1062, 1236
- Limb-lengthening procedures, external skeletal fixation for, 59, 205
- Lips, in cat, 1273
- Liver dysfunction, severe, anesthesia for, 478-480
- Load sharing, maximization of, for decreased pin stress, 63-64
- Local anesthetics, epidural, effects of, 415
- Lorazepam, pharmacokinetic variables for, 246-247
- Lumbar fractures, caudal, management of, 884-885
Steinmann pin repair of, 882-883
upper, management of, 879, 884
- Lumbar luxations, upper, management of, 879, 884
- Lumbar spine, caudal, anatomy of, 939
fracture of, combined external and dorsal fixation of, 171-176
external fixation stabilization of, 179
- Lumbar vertebrae, anatomic relationships of, 890
- Lumbosacral decompression, dorsal laminectomy for, 920-921
- Lumbosacral disease, 937-950
anatomy in, 937-938
ancillary diagnostic tests in, 942-947
clinical features of, 938-941
electrophysiologic studies for, 946
etiology of, 947-948
examination in, 941-942
surgical decompression for, 948-949
treatment of, 948-949
- Lumbosacral epidural anesthesia, 417-419. See also under *Epidural anesthesia*.
- Lumbosacral fractures, management of, 884-885
- Lumbosacral joint, diskospondylitis of, 942
- Lung, cytologic evaluation of, 1078-1083
collection techniques for, 1067-1069
in inflammation, 1080
normal findings in, 1078-1080
- Lung compliance, calculation of, 1049
dynamic, changes in, interpretation of, 1051-1052
in feline bronchopulmonary disease, 1189
pulmonary resistance and, 1048-1052
- Lupus erythematosus, systemic, feline oral cavity lesions in, 1329
- Luxations, with total hip arthroplasty, 714
- Lymph nodes, mandibular, in cat, 1275
- Lymphocytosis, in cerebrospinal fluid analysis, differential diagnosis of, 788, 791-792
- Magnetic resonance imaging, for
lumbosacral disease, 946
for spinal neoplasms, 979
of brain tumors, 825
of spinal cord injury, 828-829
of spine, 825-829
- Malocclusion, feline, 1453-1460
acquired, 1459
definition of, 1453
ethical considerations in, 1455-1457
treatment of, 1457-1459
- Mandible, fractures of, 109-119. See also *Oral fractures*.
- Mandibular teeth, feline, exposure of, dental film technique of, 1422
- Mask technique, for anesthesia induction, advantages and guidelines for, 308-309
precautions when using, 310-311
- Mastication, muscles of, in cat, 1273-1274
- Maxilla, fractures of, 109-119. See also *Oral fractures*.
- Meclofenamic acid, for canine hip dysplasia, 599
- Medetomidine, as anesthetic adjuvant, advantages and guidelines for, 291-292
- Medullary granulomatous myelitis, myelography of, 824
- Meningioma, binucleated cell in, 797
- Meningitis, 951-964. See also *Meningitis/myelitis*.
cerebrospinal fluid in, 789-790
definition of, 951
- Meningitis/myelitis, bacterial infections and, 958-960
clinical findings in, 951-952
differential diagnosis of, 952-953
protozoal infections and, 961-962
ricketsial infections and, 957-958
suppurative, steroid-responsive, 956-957
systemic fungal infections and, 960-961
- Meningoencephalitis, cerebrospinal fluid in, 789-790, 792
- Meningoencephalomyelitis, causes of, 952
definition of, 951
granulomatous, 955-956
- Mental status, with spinal cord dysfunction, 757
- Meperidine, for pain management, 361
pharmacokinetic variables for, 246-247
- Metaclopramide, with cesarean section, 481

- Metaproterenol, for bronchoconstriction, 1239
- Methadone, for pain management, 361
- Methohexital, for general anesthesia maintenance, 275-276
 pharmacokinetic variables for, 246-247
- Methoxyflurane, advantages and guidelines for, 316-318
 cardiovascular effects of, 302-303
 dose calculations for, 407-408
 for small animals, cost of, 402
 minimum alveolar concentration of, 300
 partition solubility coefficients of, 298
 physicochemical characteristics of, 298
 precautions when using, 318-320
- Methylxanthines, for bronchoconstriction, 1242
- Metrizamide, for spinal myelography, 818
- Midazolam, in dilated cardiomyopathy, 464
 in hypertrophic cardiomyopathy, 461
 pharmacokinetic variables for, 246-247
 potential uses of, 284-285
- Mitral regurgitation, severe, anesthesia for, 465-466
- Mivacurium, as neuromuscular blocking agent, 343-344
- Mixed cells, in cerebrospinal fluid analysis, differential diagnosis of, 788, 793-795
- Molars, feline, endodontic treatment of, 1445-1446
 extraction sites of, healing in, 1375-1376
 root amputation of, 1444
 root resorption of, 1368-1370
 severe, 1394-1395
- Morphine, for pain management, 361
 pharmacokinetic variables for, 246-247
- Mucociliary apparatus, as respiratory defense mechanism, 1233
- Mucokinetics, for respiratory congestion, 1247, 1251
- Mucoperiosteal flap, for oronasal fistula repair, 1106-1108
- Mucosal bulge, of lower first molar, in cat, 1275
- Muscle relaxation, antagonism of, 344-345
- Muscles, size and tone of, with spinal cord dysfunction, 757-758
 spinal cord innervation of, 758
- Muscular tissue, impalement of, in external skeletal fixation, 105
- Mycobacteriosis, of feline oral cavity, 1336
- Mycoplasma* respiratory infections, 1180-1183
 antimicrobial treatment of, 1182-1183
 association with disease, 1180-1181
 diagnosis of, 1182
 reservoirs, prevalence, and transmission of, 1181
 symptomatology, pathology, and pathogenesis of, 1181-1182
 vaccination against, 1183
- Mycoplasma* species, antimicrobial susceptibilities to, 1177
- Myelitis, 951-964. See also *Meningitis/myelitis*.
 definition of, 951
 granulomatous, medullary, myelography of, 824
- Myelography, of lumbosacral disease, 943, 947
 of medullary granulomatous myelitis, 824
 of spina bifida, 1002
 of spinal cord compression, 819
 of spinal cord lesions, 819-821
 of spinal cord neurofibrosarcoma, 822-823
 of spinal neoplasms, 976-979
 of spinal trauma, 873
 of spine, 815-824
 of vertebral fracture, 820
- Myelomeningocele, with spina bifida, 1003-1004
- Myelopathy, degenerative, 965-971
 clinical signs of, 965-966
 diagnosis of, 966-967
 pathophysiology of, 967-968
 treatment of, 968-970
- Myocardial depression, with inhalational anesthetics, 301
- Myocardial ischemia, intraoperative, electrocardiographic monitoring of, 439
- Myotatic reflexes, examination of, in spinal disease, 765-768
- N*-acetylcysteine, as respiratory mucolytic, 1248
- Naproxen, for canine hip dysplasia, 600
- Nasal adenocarcinoma, computed tomography of, 1137-1138
 ventrodorsal radiograph of, 1136
- Nasal carcinoma, 1074
- Nasal cavity, fungal diseases of, 1119-1132
- Nasal discharge, mucopurulent, with pulpal necrosis, 1110-1112
 with fungal nasal cavity infection, 1119
 with nasal aspergillosis, 1121
- Nasal distortion, with nasal cryptococcosis, 1125
- Nasal epithelial cell, columnar, normal, 1070

- Nasal flushes, for nasal/paranasal sinus tumors, 1139
- Nasal/paranasal sinus tumors, **1133-1144**
 diagnostic tests of, 1134-1140
 biopsy, 1139-1140
 computed tomography, 1135-1138
 nasal flushes, 1139
 radiography, 1135-1138
 rhinoscopy, 1138
 history and clinical signs in, 1134
 pathology and biological behavior of, 1134
 prognosis in, 1143
 therapy for, 1140-1142
 chemotherapy, 1142
 cryosurgery, 1141
 radiation therapy, 1141-1142
 surgery, 1140-1141
- Neck, trauma to, anesthesia for, 452
- Neosporidiosis, and meningitis/myelitis, 962
- Nerve damage, avoidance of, in pelvic osteotomy, 679
- Neurapraxia, with total hip arthroplasty, 715
- Neurofibrosarcoma, of spinal cord, myelography of, 822-823
- Neuroleptanalgesia, for cesarean section, 482
- Neurologic deficit, as contraindication to pelvic osteotomy, 667
- Neuromuscular blocking agents, **341-352**
 advantages and guidelines for, **347-350**
 curariform relaxants, 342
 disadvantages of, **351-352**
 equipment for, 345-346
 mechanism of action of, 341
 nondepolarizing relaxants, 342
 undesirable effects and autonomic safety margin with, 342
- Neuroradiography, of spinal neoplasms, 976-979
- Neurovascular bundles, impalement of, in external skeletal fixation, 104-105
- Neutrophilia, in cerebrospinal fluid analysis, differential diagnosis of, 788-791
- Newborn, management of, with cesarean section in dog, 483
- Nicotinic acid derivatives, precautions when using, 372
- Nitrous oxide, advantages and guidelines for, **313-314**
 minimum alveolar concentration of, 300
 partition solubility coefficients of, 298
 physicochemical characteristics of, 298
 precautions when using, **314-316**
- Noisy breathing, with fungal nasal cavity infection, 1119
- Nonne-Apeit test, of cerebrospinal fluid protein, 797
- Nonrebreathing circuits, in inhalational anesthesia, 396
 for very small animals, advantages of, 397-398
 carrier gas flows for, 398
 case for, **397-399**
 components of, 398
 disadvantages of, 399
 equipment for, 397
- Nonsteroidal anti-inflammatory drugs, for canine hip dysplasia, 598-601
 for respiratory inflammation, 1246
 precautions when using, 370-371
 side effects of, 600
- Norberg angle, of canine hip dysplasia radiography, 575-576
- Nose, cytologic evaluation of, 1069-1075
 collection techniques for, 1065-1066
 normal findings in, 1069-1070
 with inflammation, 1070-1072
 with neoplasms, 1072-1075
- Nucleus pulposus, role in fibrocartilaginous emboli, 1019
- Nutrition, role of, in canine hip dysplasia, **529-540**
- Nystatin, for respiratory fungal infection, 1253
- Obesity, prevention of, for canine hip dysplasia, 597
- Occipital bones, malformations of, congenital, 990-996
- Occipital dysplasia, congenital, 992, 996
- Occipitoatlantoaxial malformation, congenital, 995-996
- Occlusion, normal, re-establishment of, in oral fractures, 111
- Odontoclastic resorptive lesions, feline, of tooth neck, 1341
 subgingival, **1417-1432**
- Odontoclasts, in feline dental resorption, 1391, 1397-1398
- Old patients, anesthesia for, **467-469**
 induction of, 467-468
 maintenance of, 468
 recovery from, 468
 preoperative assessment and stabilization of, 467
- Operator protection, with oral-dental radiographic examination, 1280
- Opioid(s), depth of anesthesia with, 434
 general anesthesia maintenance with, 276
 pharmacodynamic properties of, 257
 receptor activity of, 258
- Opioid agonist(s), epidural, effects of, 415

- Opioid agonist(s) (*Continued*)
 for anesthesia induction, advantages and guidelines for, 269-272
 pharmacologic effects, 270
 recommended doses and drug combinations, 271
 routes of administration, 269-270
 comparative costs of, 274
 precautions when using, 273-275
- Opioid agonist-antagonist analgesics, advantages and guidelines for, 363-365
 precautions when using, 365-366
- Opioid analgesics, advantages and guidelines for, 360-361
 precautions when using, 362-363
- Oral cavity, of cats, diseases of, 1297-1307
 inflammatory, 1323-1345
 toxic lesions of, 1330-1331
- Oral-dental radiographic examination interpretation, feline, 1279-1295
- Oral fractures, 109-119
 anesthesia for, 110
 antibiotics for, 111
 biphase splint for, 115-117
 management of, principles of, 110-112
 postoperative care of, 117-118
 reduction of, 110
- Oral hygiene, in feline gingivitis/stomatitis, 1374
- Oral immunity, in cats, 1324-1329
 active vs innate, 1324-1325
 anatomic considerations in, 1324
 humoral vs cellular, 1325-1326
 local and systemic, 1324-1325
- Oral infections, in cats, 1331-1337
 bacterial, 1336
 fungal, 1337
 mycetomas, 1337
 mycoplasmal, 1336-1337
 viral, 1331-1336
- Oral inflammatory cell infiltrates, in cat, 1328-1329
- Oral mucosa, in cat, 1276
- Oronasal fistula, and chronic rhinitis, 1104
 nasal hemorrhage with, 1105
 repair of, 1106-1108
 tooth extraction for, 1108
- Orthopedic Foundation for Animals (OFA), breed results and associated observations, 581-591
 policies and procedures of, 580-581
 population of, 581
 canine hip dysplasia in, clinical observations in, 591-592
 control of, 579-593
 frequency of, 581-585
- Orthopedic problems, veterinarian's awareness of, 743
- Ortolani test, before and after BOP/shelf arthroplasty, 686
 in canine hip dysplasia, 554-555
- Osteoarthritis, in canine hip dysplasia, following pectineus tendon surgery, 618
 following three-plane intertrochanteric osteotomy, 641
- Osteocartilaginous exostoses, 996-999
- Osteochondromatosis, 996-999
- Osteoclasts, formation and resorption of, effect of cytokines and growth factors on, 1399
 ontogeny of, 1398
- Osteolysis, with nasal aspergillosis, 1122
- Osteomyelitis, as cause of chronic rhinitis, 1113-1115
 focal, with pin tract sepsis, 100
 open tibial fractures and, 165-166
- Osteonal reconstruction, with external skeletal fixation, 60-61
- Osteophytes, acetabular, radiographic appearance of, 657
 femoral neck, as contraindication to pelvic osteotomy, 666-667
 formation of, in canine hip dysplasia, 544, 566
 in degenerative joint disease, 509
- Osteotomy, corrective, for growth deformities, external skeletal fixation for, 210
 pelvic. *See Pelvic osteotomy.*
- Overfeeding, and growth rate, 530
- Oxygen extraction, with inhalational anesthetics, during progressive hypotension, 305
 with injectable anesthetics, 255
 in hypovolemic dogs, 253
- Oxygen-hemoglobin dissociation curve, 454
- Oxymorphone, cardiovascular response to, 250-251
 in hypovolemic dogs, 252-253
 in dilated cardiomyopathy, 464
 in hypertrophic cardiomyopathy, 461
 pain management with, 361
- Paco₂, with inhalational anesthetics, 303
 with injectable anesthetics, 251, 256
- Pain, assessment and recognition of, for postoperative analgesia, 354-355
 control of, nonpharmacologic approaches to, 355
 pharmacologic approaches to, 355-356
 testing for, in spinal disease, 774, 777
- Pain relief, femoral head and neck excision for, 726

- in canine hip dysplasia, BOP/shelf arthroplasty for, 693
- pectineus tendon surgery for, 617-618
- three-plane intertrochanteric osteotomy for, 641-642
- Palate, in cat, 1274-1275
- Pancuronium bromide, as neuromuscular blocking agent, 344
- Panniculus reflex, examination of, in spinal disease, 772-773
- PaO₂, with injectable anesthetics, 256
- Paper slide test, as test of proprioception, 760
- Para-aminophenol derivatives, precautions when using, 371
- Parapulpal pin composite bridges, for jaw fractures, in small animals, **1461-1467**
- Paraspinal structures, palpation of, in spinal disease, 773-774
- Parathyroid hormone, effect on canine hip dysplasia, 535
- in feline dental resorptive lesions, 1401
- Parkhill bone clamp, 2
- Parotid gland, in cat, 1274
- Parturition, physiologic changes during, 481
- Patellar reflex, examination of, in spinal disease, 766
- Patient care, anesthesia gas flow rate and, 386-387
- Patient cooperation, with mask anesthesia induction, 310-311
- Patient monitoring, anesthesia gas flow rate and, 386-387
- Patient protection, with oral-dental radiographic examination, 1279
- Pectineus tendon surgery, for canine hip dysplasia, **607-621**
 - blunt dissection in, 615
 - discussion of, 617-620
 - draping for, 610
 - incisions for, 611
 - Kelly forceps in, 612-614
 - patient selection for, 618
 - positioning and preparation for, 609
 - postoperative care in, 617
 - purpose of, 617
 - suturing in, 616
- Pelvic limbs, cutaneous innervation of, autonomous zones of, 776
- dorsal pressure on, in canine hip dysplasia, 553
- flexor reflex of, examination of, in spinal disease, 768
- somatosensory evoked potential stimulation in, 838-841
- Pelvic osteotomy, for canine hip dysplasia, **645-682**
 - adjunctive procedures with, 681
 - case selection errors in, 677-678
 - complications of, 677-681
 - contraindications to, 666-667
 - extent of, 679-680
 - hip stability test in, 676
 - indications for, 660-666
 - plate placement in, 675
 - postoperative care in, 676
 - postoperative radiographs of, 678
 - results of, 676-677
 - surgical procedure for, 667-676
 - technical considerations in, 678-681
 - nondysplastic indications for, 664-666
- Pelvis, asymmetry of, in canine hip dysplasia, 570-572
- Penicillosis, of nasal cavity, 1120-1124
- Pentazocine, pharmacokinetic variables for, 246-247
- Pentobarbital, cardiovascular response to, 250-251
- pharmacokinetic variables for, 246-247
- Periapical abscess, in cat, drainage of, 1436
- Perineal reflex, examination of, in spinal disease, 770-771
- Periodontal disease, 1103
 - and oronasal fistula, 1105
 - feline, 1337-1341
 - chronic, 1372
 - control of, experimental models for, **1309-1321**
 - immunologic causes of, 1310
 - treatment of, 1305-1306
- Periodontal ligaments, in cat, 1272
 - destruction of, with dental resorptive lesions, 1387
- Periodontal probe, 1103
- placement of, 1104
- Periodontal tissue, in cat, 1271-1273
- Periodontitis, definition of, 1102
 - in cats, bone defects in, 1371
 - definition of, 1324
 - host-bacterial interaction in, 1398-1400
 - juvenile onset, 1371
 - treatment of, 1339-1341
 - with subgingival odontoclastic resorptive lesions, 1417
- Periodontium, destruction of, with tooth fracture, 1114
- Periosteal elevators, for external skeletal fixation application, 40
- Peripheral nerves, spinal cord innervation of, 758
- Peripheral perfusion, monitoring of, in anesthetized patient, 427
- Peritonitis, infectious, feline, and meningitis/myelitis, 954-955
- Pes varus, external skeletal fixation for, 221-222

- Phaeohyphomycosis, of nasal cavity, 1129
- Phalangeal fractures, avian, repair of, 236
- Pharyngitis, in cats, chronic, feline calicivirus and, 1334, 1354
definition of, 1324
- Phenylbutazone, for canine hip dysplasia, 599
- Philtrum, in cat, 1273
- Pin(s). See *Fixation pins*.
- Pin tract(s), drainage of, with external skeletal fixation, 101-102
infection of, causes of, 81-82
with external skeletal fixation, 99-102
inflammation of, causes of, 81
- Pin tract wound, management of, 82-84
- Piroxicam, for canine hip dysplasia, 600-601
- Placing, in spinal disease, 764
- Plaque bacteria, control of, in feline gingivitis/stomatitis, 1372
- Plate-bending irons, for external skeletal fixation application, 40
- Plate fixation, in pelvic osteotomy, 680
- Platelet-activating factor, as respiratory inflammatory mediator, 1236
- Pleocytosis, eosinophilic, of cerebrospinal fluid, with meningoencephalomyelitis, 793
mixed cell, with spinal disease, 793-795
- Pleural pressure, change in, calculation of, 1048
during anesthesia, 1051
during forced exhalation, 1055
during normal breathing, 1054
- Pneumonia, anesthesia for patients with, 454-455
mixed inflammatory, 1082
neutrophilic, 1081
- Pollution control, anesthesia gas flow rate and, 386
- Polyreactivity, and tissue destruction, in feline gingivitis/stomatitis, 1365-1366
- Polysulfated glycosaminoglycans, for canine hip dysplasia, 601-602
- Portocaval shunt, anesthesia for, 479
- Positioning, proprioceptive, in spinal disease, 759-760
- Postoperative analgesia, 353-379
pain assessment and recognition in, 354-355
- Postsynaptic events, in somatosensory evoked potentials, 840
- Potassium iodide, as expectorant, 1248
- Prednisolone, for brachycephalic airway syndrome, 1151
- Premolar(s), canine, sagittal section of, 1102
feline, root resorption of, 1368-1369
simultaneous repair in, 1392-1393
- Pressure-volume curve, static, 1050
- Propofol, for general anesthesia
maintenance, 276
pharmacokinetic variables for, 246-247
potential uses of, 282-284
- Proprioceptive positioning, in spinal disease, 759-760
- Prostaglandins, as respiratory inflammatory mediator, 1236
- Prostanoids, as mediator in airway disease, 1062
- Protein, effect on canine hip dysplasia, 533
in cerebrospinal fluid, 796-801
- Proteoglycans, loss of, in degenerative joint disease, 547-548
- Protothecosis, of nasal cavity, 1131
- Protozoal encephalitis, cerebrospinal fluid antigen-antibody titers in, 806
- Protozoal infections, and meningitis/myelitis, 961-962
- Pubic osteotomy, 668
incisions for, 669
surgical procedure for, 667-670
- Pulmonary carcinoma, cytology of, 1083
- Pulmonary function testing, 1087-1099
arterial blood gas analysis in, 1088-1091
diagnostic evaluation in, 1088
flow-volume curves in, 1092-1094
history and physical examination in, 1087-1088
in canine lower airway disease, 1218
pulmonary mechanics in, 1094-1097
- Pulmonary mechanics, 1094-1097
in dog, clinically significant, 1215-1216
- Pulmonary neoplasms, cytology of, 1080-1083
- Pulmonary resistance, and lung compliance, 1048-1052
changes in, interpretation of, 1051-1052
effect of terbutaline on, 1096
- Pulmonary tree, in dog, zones of, 1203
- Pulpal tissue, with feline dental resorptive lesions, 1396
- Pulpotomy, vital, for feline malocclusion, 1457-1458
- Pyrazolon derivatives, precautions when using, 372
- Quadrilateral external skeletal fixation device, 15
- Qualitative anesthesia, case for, 410-411
- Quantitative anesthesia, 405-411
case for, 409-410
clinical aspects of, 405-408
definition of, 405
delivery of, 405-406
inhaled anesthetic uptake calculations for, 406-408

- liquid injection for, 406
- surface area and metabolic calculations for, 406
- vaporizers for, 405-406
- Quinolones, fluorinated, for gram-negative respiratory infection, 1252
- Radial immunodiffusion, for cerebrospinal fluid immunoglobulins, 801
- Radiation safety, with oral-dental radiographic examination, 1279-1280
- Radioaerosol ventilation scan, of canine chronic bronchitis, 1221
- Radiography, of lumbosacral disease, 942-943
 - of spina bifida, 1000-1002, 1005
 - of spinal trauma, 871
 - of spine, 811-815
- Radiolucency band, in feline teeth, interpretation of, 1289-1290
- Radius, external skeletal fixation of, for angular and rotational deformities, 213-214, 216-217
 - for lengthening transverse osteotomy, 220
 - for premature physal closure, 215-219
- Radius/ulna, avian, fractures of, repair of, 234-235
 - external skeletal fixation of, for fractures in toy breeds, 203
 - for growth deformities, 215
 - for premature distal physal closure, 219-220
- fractures of, 135-148
 - external skeletal fixation of, aftercare and complications of, 145-146
 - bilateral-biplanar, 94-96
 - for delayed union, 203-204
 - principles of application of, 136-137
 - types of, 137-144
 - type I, 139-141
 - type II, 141-143
 - type III, 143-144
 - unilateral-biplanar, 91-94
 - open, external skeletal fixation of, 199, 201
 - preoperative considerations in, 136
 - stabilization of, 95
- Range of motion, in canine hip dysplasia, 553
- Rebreathing circuits, 395-396
 - for very small animals, case for, 400-403
- Reduction, angle of, in canine hip dysplasia, 651-652
- Renal disease, end-stage, stable, anesthesia in, 469-471
- Resorptive lesions, in feline teeth, interpretation of, 1290-1292
- Respiratory defense mechanisms, airway inflammation and, 1194-1195
- Respiratory depressants, inhalational anesthetics as, 306
 - management of, 453
- Respiratory monitoring, of anesthetized patient, 428-431
- Respiratory parameters, normal ranges for, 426
- Respiratory system, physiology of, 1043-1064
- Respiratory therapeutics, 1231-1258
- Respiratory tract, cytologic evaluation of, 1065-1085
 - collection techniques for, 1065-1069
 - defense mechanisms in, 1233-1234
 - disease of, chronic, acute presentation of, 1146-1147
 - drugs for, 1242-1243
 - drugs used to modulate, 1237-1250
 - infections of, *Bordetella*, 1173-1180
 - Mycoplasma*, 1180-1183
 - inflammatory mediators in, 1234-1236
 - mononuclear phagocyte system of, as respiratory defense mechanism, 1234
 - physiology of, normal, 1231-1234
 - stimulants of, for respiratory disease, 1249
- Rhabdomyosarcoma, laryngeal, 1161
- Rhinitis, chronic, and dental disease, 1101-1117
 - bony sequestra and, 1113-1115
 - endodontic disease as cause of, 1109-1113
 - endodontic-periodontic lesion and, 1112
 - intranasal tooth migration and, 1113-1115
 - osteomyelitis and, 1113-1115
 - periodontal disease as cause of, 1101-1109
 - cytologic evaluation of, 1070-1072
 - mycotic, 1073
 - neutrophilic, 1071
- Rhinocopy, for nasal aspergillosis, 1121
- for nasal/paranasal sinus tumors, 1138
- Rhinospodiosis, of nasal cavity, 1128-1129
- Richard's Canine II total hip prosthesis, 705-706
- Richards mandibular screw, 116
- Rickettsial encephalitis, cerebrospinal fluid antigen-antibody titers in, 805-806
- Rickettsial infections, and meningitis/myelitis, 957-958
- Right ventricular muscle, electromyography of, 1168

- Root apex, in feline tooth, sealing of, 1446
- Root-entry zone potentials, in
somatosensory evoked potentials, 840
- Root fragments, retained, in feline teeth,
in extraction sites, 1375-1376
radiographic appearance of, 1292
- Root resorption, in cats, extensive, in
subgingival odontoclastic resorptive
lesions, 1421
in gingivitis/stomatitis, 1366-1370
processes in, 1398
- Rubber power chain, for feline
malocclusion treatment, 1457-1458
- Rudy boot technique, for transarticular
external skeletal fixation, 183-184
- Sacro tuberosus ligament, release of, in
pelvic osteotomy, 680
- Saliva, role in feline gingivitis, 1363
- Salivary glands, in cat, 1275
- Salter fractures, of humerus, external
skeletal fixation for, 124
- Scaling instruments, for feline dental
prophylaxis, 1301-1302
- Schroeder fixation splints, 6
- Sciatic nerve, location of, in BOP/shelf
arthroplasty, 688
- Sciatic neuropathy, in BOP/shelf
arthroplasty, 693
- Screw fracture, in BOP/shelf arthroplasty,
693
- Screw placement, in BOP/shelf
arthroplasty, 689
- Sedatives, for tracheal collapse, 1209
- Seromas, in BOP/shelf arthroplasty, 693
- Serotonin, as respiratory inflammatory
mediator, 1235-1236
- Sertl shelf arthroplasty (BOP procedure),
for canine hip dysplasia, 683-701. See
also BOP/shelf arthroplasty.
- Sevoflurane, potential uses of, 335-336
- Sink-source potentials, in somatosensory
evoked potentials, 840
- Sinus(es), nasal/paranasal, tumors of,
1133-1144
- Sinus tracts, chronic draining, in BOP/
shelf arthroplasty, 693
- Skeletal fixation, external. See *External
fixators; External skeletal fixation.*
- Skeletal growth, inborn errors of, and
developmental stenosis, 1008-1010
- Skin, pressure necrosis of, in external
skeletal fixation, 103-104
- Sneezing, as respiratory defense
mechanism, 1233
with fungal nasal cavity infection, 1119
with nasal aspergillosis, 1121
- Soft tissues, impalement of, in external
skeletal fixation, 104-105
management of, in external pin fixation,
78-84
- Somatosensory evoked potentials, 833-
853
anatomy and physiology of, 837-846
applications in surgery and anesthesia,
852-853
cerebral, abnormalities of, 849-851
compound action potentials in, 837
field potentials in, 837-838
in spinal cord disease, changes in, 846-
852
mixed potentials in, 838
technical considerations in, 834-837
anesthesia/sedation, 837
bipolar vs monopolar configuration,
835
recording, 834
recording electrodes, 834-836
stimulation, 836-837
use in prognosis of acute transverse
myelopathies, 851-852
- Spina bifida, 999-1005
clinical findings in, 1003-1004
diagnosis and treatment of, 1004-1005
myelography of, 1002
radiography of, 1000-1002, 1005
types of, 999
with myelomeningocele, 1003-1004
- Spinal canal, lesions of, computed
tomography of, 826-827
- Spinal cord, anatomy of, effect of
anesthetics on, 413-416
ascending evoked potentials of, ana-
tomic and physiologic basis for, 844
canine, arterial vasculature of, 1018
compression of, abnormal ascending
evoked potentials in, 847
myelography of, 819
with cervical vertebral malformation/
malarticulation syndrome, 924-
925
conduction velocity measurement of,
somatosensory evoked potentials
for, 843-846
disease of, diagnosis of, electromyogra-
phy in, 853-855
somatosensory evoked potentials in,
846-852
dorsum potentials in, abnormalities of,
846-847, 850-852
injury to. See also *Spinal trauma.*
compression vs concussion, 860-862
electrolyte aberrations with, 869
magnetic resonance imaging of, 828-
829
management of, algorithm for, 872
conservative, 876-877

- primary, pathophysiology of, 866
- secondary, biochemical changes with, 868-869
 - factors in, 869
 - mediators of, 867
 - pathophysiology of, 866-868
 - vascular mechanisms of, 868
- lesions of, myelography of, 819-821
- segments of, peripheral nerve and muscle distributions of, 758
- tumor of, myelography of, 978, 980
- Spinal disease, **751-780**
 - activities causing, 753
 - cerebrospinal fluid protein profiles in, 799-800
 - cerebrospinal fluid white blood cell counts in, 785-786
 - classification of, 778
 - clinical signs for, breed and age of onset of, 752
 - cytologic abnormalities in, 786-796
 - decompressive techniques for, **917-921**
 - history of, 753-754
 - localization of, 755-757
 - neurologic examination for, 754-777
 - interpretation of results in, 777-779
 - physical examination for, 754
 - postural reactions to, 758-765
 - signalment in, 751-753
- Spinal fractures, 862, 865
 - burst, 864
 - combination, 864
 - instability in, management of, 875
 - management of, conservative, 876
 - surgical, 877-878
 - radiographic assessment of, three-compartment theory of, 874-876
 - wedge compression, 862-863
- Spinal luxations, 864-865
 - management of, conservative, 876
 - surgical, 877-878
- Spinal malformations, congenital, **985-1015**
- Spinal neoplasms. *See Spine, neoplasms of.*
- Spinal pain, caudal, posture in, 940
- Spinal stenosis, 1005-1012
 - causes of, 1005-1006
 - clinical signs of, 1011-1012
 - congenital, 1006
 - developmental, idiopathic, 1010-1011
 - diagnosis of, 1012
 - segmental, 1007
 - treatment of, 1012
- Spinal trauma, **859-888**. *See also Spinal cord, injury to.*
 - advanced imaging of, 873-874
 - causes of, 859
 - classifications of, 860-868
 - diagnosis of, 871-874
 - management of, therapeutic, 874-885
 - myelography of, 873
 - pathophysiology of, 866-869
 - physical and neurologic examination in, 871
 - radiography of, 871
 - treatment of, initial, 870
- Spine, disease of. *See Spinal disease.*
- electrodiagnostic examination of, **833-857**
 - fractures of. *See Spinal fractures.*
 - hyperextension of, 863
 - hyperflexion of, 862
 - imaging of, **811-831**
 - luxations of. *See Spinal luxations.*
 - magnetic resonance imaging of, 825-829
 - malformations of, **985-1015**
 - myelography of, 815-824
 - contrast agents for, 817-818
 - indications for, 815
 - interpretation of, 818-821
 - technique of, 816-817
 - neoplasms of, **973-984**
 - cerebrospinal fluid analysis for, 979
 - classification of, 974
 - clinical signs in, 974-975
 - diagnosis of, 975-981
 - minimum database for, 975-976
 - neuroradiography for, 976-979
 - electrodiagnostics of, 981
 - metastatic disease in, 983
 - myelography for, 976-979
 - signalment and history in, 973-974
 - treatment of, 981-983
- radiography of, 811-815
 - positioning in, 812
 - survey, 812-813
 - interpretation of, 813-815
 - projections for, 814-815
- stenosis of. *See Spinal stenosis.*
- tomography of, 821-825
 - computed, 823-827
 - linear, 821-823
- trauma to. *See Spinal cord, injury to; Spinal trauma.*
- Spirochete encephalitis, cerebrospinal fluid antigen-antibody titers in, 805-806
- Spreaders, for feline endodontics, 1440
- Stader reduction and fixation splints, 4-5
- Steinmann pins, for external skeletal fixation, 74
 - for vertebral external fixation, 173-174
- Stifle, immobilization of, biphasic splint for, 192
- Stomatitis, in cats, **1361-1383**
 - bone loss in, 1373
 - chronic, 1372
 - feline calicivirus and, 1334, 1354, 1358
 - definition of, 1323

- Stomatitis (*Continued*)
 description and etiopathogenesis of, 1361-1363
 pocket formation in, 1373
 treatment regimens for, 1372-1377
- Strain, internal, in bone, 48-49
- Strength, with spinal cord dysfunction, 757-758
- Stress, internal, in bone, 48-49
- "Stress-radiographic method," of canine hip dysplasia imaging, 575
- Stretch reflexes, examination of, in spinal disease, 765-768
- Stridor, causes of, 1155
- String lesions, oral, in cat, 1341
- Subluxation test, for canine hip dysplasia, 647-649, 651, 653
- Sufentanil, pharmacokinetic variables for, 246-247
- Suffering, control of, nonpharmacologic approaches to, 355
 pharmacologic approaches to, 355-356
- Sulfonamides, for respiratory infection, 1253
- Supereruption, in feline subgingival odontoclastic resorptive lesions, 1419
- Superoxide dismutase, for canine hip dysplasia, 602
- Surgery, somatosensory evoked potential applications in, 852-853
- Synovium, villous hypertrophy of, in canine hip dysplasia, 545
- Systemic debilitation, severe, anesthesia in, 491-494
- Systemic factors, in feline dental resorptive lesions, 1400-1402
- Tarsometatarsal fractures, avian, repair of, 236
- Telazol, potential uses of, 286-287
- Temporomandibular joint, in cat, radiographs of, 1295
- Terbutaline, effect on pulmonary resistance, 1096
 for bronchoconstriction, 1239
 for canine chronic bronchitis, 1223
 for feline bronchial asthma, 1196
- Theophylline, for bronchoconstriction, 1239-1241
 for canine chronic bronchitis, 1223
 for feline bronchial asthma, 1196
- Thiabendazole, for nasal aspergillosis, 1124
- Thiamylal, cardiovascular response to, 251
 in dilated cardiomyopathy, 464
 in hypertrophic cardiomyopathy, 461
 pharmacokinetic variables for, 246-247
- Thiobarbiturates, for general anesthesia maintenance, 275
 ultrashort, for anesthesia induction, precautions when using, 264-265
- Thiopental, cardiovascular response to, in hypovolemic dogs, 252-253
 in dilated cardiomyopathy, 464
 in hypertrophic cardiomyopathy, 461
 pharmacokinetic variables for, 246-247
- Thoracic fractures, management of, 879, 884
 spinal and vertebral body plate repair of, 880-881
- Thoracic limb, cutaneous innervation of, autonomous zones of, 775
 flexor reflex of, examination of, in spinal disease, 768
- Thoracic luxations, spinal and vertebral body plate repair of, 880-881
 upper, management of, 879, 884
- Thoracic vertebral stenosis, in Doberman Pinschers, 1006-1010
- Thoracolumbar spine, intervertebral disc disease of, dorsolateral hemilaminectomy for, 911-912
 fenestration of, 905-907
 modified dorsal laminectomy for, 907-911
 perioperative care in, 910-911
 surgical technique for, 907-910
 surgical treatment of, 905-912
- Three-plane intertrochanteric osteotomy, for early-stage canine hip dysplasia, 623-643
- Thromboembolism, with total hip arthroplasty, 716
- Thyroarytenoid muscle, electromyography of, 1168
- Tibia, external skeletal fixation of, for growth deformities, 221
 fractures of, 161-170
 external skeletal fixation of, bilateral-biplanar, 94-96
 diaphyseal, 164
 distal, 165
 for nonunions/malunions, 166-168
 general principles of, 162-163
 proximal, 164
 unilateral-biplanar, 91-94
 open, and osteomyelitis, 165-166
 stabilization of, 92, 94
- Tibial nerve, somatosensory evoked potentials of, 838-839
- Tibiotarsal fractures, avian, repair of, 236
- Tidal volume, during anesthesia, 1051
- Tomography, computed. *See* *Computed tomography*.
 linear, for lumbosacral disease, 944-945
 of spine, 821-823
- Tongue, in cat, 1275

- Tonic neck, in spinal disease, 764-765
 Tonsillitis, in cat, definition of, 1324
 Tooth formulas, in cat, 1265-1266
 Tooth (teeth), extraction of, chronic rhinitis following, 1115-1116
 fracture of, and endodontic disease, 1110-1112
 in cats, abnormalities of, treatment of, 1304-1306
 amputation and pulp capping of, 1448-1450
 anatomic nomenclature of, 1266
 ankylosis with alveolar bone, 1396
 carnassial, scissor occlusion of, 1268
 eruption of, 1268-1269
 extraction of, for advanced dental resorptive lesions, 1425
 neck lesions of, 1385, 1389
 histologic schema in, 1397
 treatment of, 1305
 occlusal relationship of, 1268
 open apices of, 1292
 root abscess of, 1336
 structure of, 1269-1271
 substance of, radiographic abnormalities in, 1289-1292
 surface pits on, with dental resorptive lesions, 1387, 1390
 topographic terminology of, 1268-1269
 migration of, intranasal, as cause of chronic rhinitis, 1113-1116
 Total hip arthroplasty, complications with, 712-716
 bone resorption, 713, 716
 cement disease, 714
 fractures, 715-716
 infection with cement, 714-715
 luxations, 714
 neurapraxia, 715
 thromboembolism, 716
 for canine hip dysplasia, 703-719
 contemporary, 704-707
 operative techniques for, 708-711
 pioneers in, 703-704
 preoperative considerations in, 707
 postoperative considerations in, 711-712
 prosthetic fitting in, 709
 radiographic evaluation of, 712
 results with, 712-716
 surgical exposure for, 708
 Total hip prosthesis, cemented, 704
 cementless, 705
 fissure fracture with, 710
 Toxic epidermal necrolysis, feline oral cavity lesions in, 1330
 Toxoplasmosis, and meningitis/myelitis, 962
 Trachea, pulmonary mechanics of, 1204-1205
 Tracheal collapse, in dog, 1204-1210
 clinical findings in, 1205-1206
 diagnosis of, 1206-1207
 prognosis in, 1210
 pulmonary mechanics in, 1204-1205
 relationship to chronic bronchitis, 1208
 treatment of, 1208-1210
 Tracheal epithelium, function of, 1213
 Tracheobronchial tree, anatomy of, 1045
 chronic disease of, in dog, 1203-1229
 culture of, in canine lower airway disease, 1218
 cytologic evaluation of, 1075-1078
 collection techniques for, 1066-1067
 in disease, 1076-1078
 normal findings in, 1075-1076
 Tracheobronchitis, allergic, cytology of, 1076-1077
 and laryngitis, 1158
 Transarticular application, of external skeletal fixation, 181-194
 Transelbow splint, Kirschner-Ehmer, 188
 Transnostril core biopsy, for nasal cavity tumor, 1140
 Transstifle splint, Kirschner-Ehmer, 187-188
 Transtarsal splint, Kirschner-Ehmer, 189
 Trauma, and fibrocartilaginous emboli, 1019
 head and neck, anesthesia for, 452
 Triceps reflex, examination of, in spinal disease, 767
 Trichosporonosis, of nasal cavity, 1130
 Tricuspid regurgitation, severe, anesthesia for, 466
 Trochanter minor, removal of, with biceps femoris muscle sling, 731
 Trochanteric compression test, for canine hip dysplasia, 650, 653-654
 Turner pin, for external skeletal fixation, 73
 Ulna, distal physis of, premature closure of, deformities associated with, 212
 external skeletal fixation for, 211-215
 fracture of. See under *Radius/ulna*.
 Upper airway obstruction, severe, anesthesia for, 452-453
 Urethral obstruction, feline, anesthesia for, 475-478
 Urinary function, examination of, in spinal disease, 771-772

- Vaporizer(s), control of, with inhalational anesthesia, 299
for quantitative anesthesia delivery, 485-406
- Vaporizer position, with inhalational anesthesia, 389-394
effects of flow on inspired concentration, 390
in circuit, 390
case for, 391-392
out of circuit, 389
case for, 392-394
- Vascular resistance, systemic, with inhalational anesthetics, 302, 306
during progressive hypotension, 304
with injectable anesthetics, 250, 254
in hypovolemic dogs, 252
- Vasculitis, idiopathic, feline oral cavity lesions in, 1330
- Vecuronium bromide, as neuromuscular blocking agent, 344
- Venous sinography, for spinal neoplasms, 979
- Ventilation, airflow in, 1044
- Ventilometry, of anesthetized patient, 429
- Ventrodorsal leg extended (OFA)
radiographic view, of canine hip dysplasia, 564-574, 654
appearance of, 567-568
artifacts and pitfalls in, 569-572
grading or classification of, 573-574
interpretation of, 568-569
mild, 662
moderate, 663
positioning in, 564-566, 570
radiographic technique in, 566-567
restraint in, 567-568
severe, 665
of normal hip, 661
- Vertebra, butterfly, congenital,
radiographic appearance of, 988
fracture of, etiopathogenesis of, 862-866
hemilaminectomy for, 917-920
myelography of, 820
transverse, 865-866
luxation of, hemilaminectomy for, 917-920
transitional, and spinal stenosis, 1008
- Vertebral canal, contents of, implications for anesthesia, 414
- Vertebral column, fractures and luxations of, 171-180
biomechanics of, 175-178
dorsal spinal plates for, 172
infection/failure of, external skeletal fixation for, 178-179
three-compartment classification of, 177
- Vestibule, of mouth, in cat, 1273
- Veterinarian, information needed by, on canine hip dysplasia, 742-743
- Villous synovitis, in canine hip dysplasia, 545-546
- Viral encephalitis, cerebrospinal fluid antigen-antibody titers in, 804-805
- Viral infections, and meningitis/myelitis, 953-955
- Vital pulpotomy, for feline malocclusion, 1457-1458
- Vitamin C, effect on canine hip dysplasia, 533-534
- Vocal folds, ventral midline surgical approach to, 1161-1164
- Warmth, for canine hip dysplasia, 597
- Wedge technique, of canine hip dysplasia radiography, 574
- Weight-drop injury, somatosensory evoked potentials in, 853
- Wheelbarrowing, in spinal disease, 760-761
- Williams screws, for biphasic oral splints, 116
- Wound contamination, in oral fractures, 112
- Wrenches, for external skeletal fixation application, 37
- Xylazine, as anesthetic adjuvant,
advantages and guidelines for, 289-291
cardiovascular response to, 250-251, 254-256
pharmacokinetic variables for, 246-247
- Zygomatic gland, in cat, 1274

